

ABSTRACT

The invention relates to a randomly branched polyamide comprising at least units derived from:

1. AB monomers,
2. at least one compound I, being a carboxylic acid ( $A_v$ ) having a functionality  $v \geq 2$  or an amine ( $B_w$ ) having 10 a functionality  $w \geq 2$ ,
3. at least one compound II, being a carboxylic acid ( $A_v$ ) having a functionality  $v \geq 3$  or an amine ( $B_w$ ) having a functionality  $w \geq 3$ , compound II being a carboxylic acid if compound I is an amine or 15 compound II being an amine if compound I is a carboxylic acid and the amounts of all units derived from carboxylic acids and amines in the polyamide satisfying conditions as mentioned in claim 1.

The composition of the randomly branched polyamide is such that it cannot form a crosslinked polyamide (and thus no gels, either), in particular during the prepolymerization, the polymerization, the post-condensation, the processing and the storage of the randomly branched polyamide, and this at a variety 25 of ambient factors, for instance at elevated temperature and pressure. The polyamide is eminently suitable for the production of fibre and film, in particular for flat film.